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## A STUDY ON PRE AND POST FINANCIAL PERFORMANCE (SPREAD RATIOS) OF MERGED BANKS IN INDIA

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#### **ABSTRACT**

This paper attempts to analyze the financial growth of merged banks in India. Merged form major part of total banking system in India so there is a need to evaluate the performance of these banks. The study is based upon secondary data covering the period from 1990-2010. The study is selected 10 commercial merged banks in India. For analyzing the Mean, Standard Deviation, Coefficient of Variation, Compound Annual Growth rate and Paired t-test of Interest income to working fund (x1), Ratio of interest expenses to working fund (x2) and Ratio of Spread to Working fund (x3) calculated. It is concluded the CAGR of various variables have shown variation s from bank to bank. In this analytical research paper, an Attempt has been made to evaluate the effectiveness of mergers and acquisitions of the selected merged banks on the basis of selected variables prior and after mergers and acquisitions.

### **INTRODUCTION**

In the changing scenario, every business including service institutions like banks strive hard for survival in this growing era of core competence. Due to intense completion among the banks, every bank is doing something better than others to capture the business. It is necessary for any business firms to analyze its financial health. In this regard, it is necessary to analyze the financial health of merged banks to establish its financial health in the form of profitability, liquidity, solvency etc. This analysis provides a clear picture of the financial soundness of a firm and a road map outlining the directions the business is heading to. So an attempt has been made in this present chapter to have an insight into the examination of financial health of merged banks in India selected for the study.

For measuring the financial performance, ratio analysis is used in the study. Ratio analysis is a tool which attempts to measure and compare financial performance. The use of ratio analysis helps to identify the areas which need further investigation of study. It will also pin point the areas in which a concern may improve its performance. Apart from this, it is one of the reliable and commonly used tools for analyzing or measuring the financial / operational performance of the banks. It is because of its conciseness, comparability and direct relevance of the relationship established to the various earning capabilities of the banks.

### **REVIEW OF LITERATURE**

Naresh Kumar (2007) in his study entitled "Corporate Strategy in Emerging Scenario – Acquisitions and Mergers" has discussed the recent trend in M&A. The study revealed that the Indian corporates have been gearing up to restructuring and repositioning to seize the opportunities and to meet the challenges thrown globalization. The corporates aimed at achieving optimum size as a means for survival and growth in the competitive economy.

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Ravi Prakash and Hasneetha Matta (2007) in their study on "Tax Implications and Planning of Mergers and Acquisitions in India" have discussed the importance of tax implications and effective planning of tax in every deal of merger and acquisition.

Amit Ghosh<sup>76</sup> (2007) in his study on "The Mechanics of Merger and Acquisition" has studied the factors contributing to mergers and acquisitions. He just outlined the requirements under the company law, tax law and accounting standards. He also emphasized about the importance of merger financing, valuations and the HR issue in maximizing the gains. The study also revealed the importance of the top management their care and focus after the process of merger.

### **OBJECTIVE**

1. To analyze and compare the financial performance (Spread ratios) Interest income to working fund (x1), Ratio of interest expenses to working fund (x2) and Ratio of Spread to Working fund (x3) of pre and post merged banks.

### **HYPOTHESIS**

1. There is no significant difference between pre merger and post merger spread ratios of Interest income to working fund (x1), Ratio of interest expenses to working fund (x2) and Ratio of Spread to Working fund (x3)

### **METHODOLOGY**

The study is analytical in nature, and it is based on secondary data. The information has been collected from the official directory and data base of Centre for Monitoring Indian Economy (CMIE) namely PROWESS. The published annual reports of the selected banks related websites, magazines and journals on finance have also been used as data source. The scope of the study is limited to the analysis of Interest income to to working fund (x1), Ratio of interest expenses to working fund (x2) and Ratio of Spread to Working fund (x3) merged banks cover the period of 10 years as five years before the date of merger and five years after the date of merger. The data has been analyzed using Mean, Standard Deviation, Coefficient of Variation, Compound Annual Growth rate and Paired t-test.

Table No. 1 Sample Banks

S.No	Name of the Transferor Bank	Name of the Transferee Bank	Date of Merger	Public / Private and Foreign
				Banks
1	Kashi Nath Seth Bank	State Bank of India	01/011996	Public Bank
	Ltd			
2	Sikkim Bank Ltd	Union Bank of India	22/12/1999	Public Bank
3	Times Bank Ltd	HDFC Bank	26/02/2000	Private Bank
4	Bank of Madura Ltd	ICICI Bank	10/3/2001	Private Bank
5	The British Bank of	Hong Kong Shangai	2001	Foreign Bank
	Middle East	Banking Corporation		
6	ANZ- Grinlayas Bank	Standard Chartered	2001	Foreign Bank
		Bank		
7	Benaras State Bank	Bank of Baroda	20/06/2002	Public Bank
	Ltd			

8	Nedungadi Bank Ltd	Punjab National Bank	1/2/2003	Public Bank
9	Global Trust Bank	Oriental Bank of	14/08/2004	Public Bank
	Ltd	Commerce		
10	IDBI Bank Ltd	IDBI	2/4/2005	Private Bank

### **SPREAD RATIOS**

Spread is the difference between interest earned (on loan and advances) and interest paid (on deposit and borrowing) by the banks. These ratios play a major role in determining the profitability of the banks. It is the net amount available to the banks for meeting their operating and managerial expenses. In order to analyze the profitability performance, it becomes imperative to study the magnitude of this spread and its components i.e., interest earned and interest paid in relation to working fund of the banks. Hence, the following ratios are calculated for the present study.

- 1. Ratio of Interest Income to Working fund (X1)
- 2. Ratio of Interest expenses to Working fund (X2)
- 3. Ratio of spread to Working fund (X3)

### **INTEREST INCOME TO WORKING FUND (X1)**

Interest earning refers to the return on pure banking business i.e., its traditional business. The interest income includes interest and discount earned on advances, income from investment made by a commercial bank and other interest income. The ratio of interest income as percentage of working fund is an indicator of the rate at which a bank earns income by lending funds.

Table No. 2
Interest Income to Working Fund (X1)

	PRI	E MER	GER	POS	T MER	GER	MEAN
BANKS	MEAN	SD	CV (%)	MEAN	SD	CV (%)	GROWTH RATE
SBI	07.51	00.66	08.90	08.88	00.41	04.68	18.34
UBI	07.56	01.17	15.50	09.63	00.60	06.27	27.35
HDFC	08.28	01.35	16.32	08.16	00.92	11.30	-01.47
ICICI	08.98	00.77	08.65	06.84	02.07	30.34	-23.86
HKSBC	07.56	01.20	13.50	06.88	00.49	07.24	-22.66
SCB	09.11	00.80	08.84	13.51	02.81	20.82	48.32
BOB	09.55	00.49	05.14	09.15	00.59	06.50	-04.18
PNB	09.68	01.19	12.32	07.94	00.94	11.90	-17.98
OBC	06.15	00.45	07.36	10.15	00.29	02.86	64.97
IDBI	09.19	01.76	19.24	06.76	00.35	05.20	-26.35
Over all	08.42	01.15	13.74	08.27	01.27	15.37	-01.82

Source: Compiled from Annual Reports of the Banks

The table 2 indicates that the mean ratio for interest income to working fund during pre merger period ranges between 6.15 to 9.68 with an overall mean of 8.42 and CV of 13.74% among the ten banks. For all banks have higher mean ratio whereas the other banks have lower mean ratio compared to overall mean ratio. The mean of post merger period ranges between 6.768 to 13.51 with an overall mean of 8.270 and CV of 15.37%. Regarding the percentage of change in mean SBI, UBI, SCB, and OBC only show increased position by 18.34%, 27.35, 48.32% and 64.97% respectively. In case of the other banks, mean ratio is lesser than the pre merger period ranges from -1.47% to 26.35%. It is concluded from the above table that the interest income of the merged banks during post merger period compared to the pre merger shows a positive trend in case of SBI, OBC and UBI and in other case it is reduced compared to the pre merger period.

### TEST OF SIGNIFICANCE OF THE OVERALL MEAN RATIO INTEREST INCOME TO WORKING FUND OF PRE AND POST MERGER PERIOD

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### **PAIRED t- Test**

Mean	SE (mean difference):	
Difference:	0.7426	
0.1553		
Calculated t- value:	DF: 9	Table value:
0.209 (NS)		2.306

The t-test shows that there is no significant difference in the mean ratio interest income to working fund between pre and post period of merger.

### INTEREST EXPENSES TO WORKING FUND (X2)

The ratio of Interest expenditure to working fund represents relationship of the cost of funds to the working fund for the banks. The major ingredients of interest paid consist of interest paid on deposit, borrowing and other interest expenditure. This ratio is an indicator of the rate at which a bank incurs expenditure on borrowed funds from public as well as other borrowings.

Table No. 3
Interest Expenses to Working Fund

interest Expenses to Working Fund							
BANKS	PRE MERGER			POS	T MER	GER	MEAN GROWTH
	MEAN	SD	CV (%)	MEAN	SD	CV (%)	RATE
SBI	05.02	00.71	14.32	06.19	00.28	04.67	23.36
UBI	05.92	00.43	07.39	05.90	00.70	12.01	-00.30
HDFC	06.20	01.57	25.34	06.83	00.93	13.64	10.14
ICICI	06.26	00.76	12.13	08.25	00.69	08.36	31.83
HKSBC	07.24	00.71	09.88	06.79	01.40	20.71	-06.15
SCB	05.65	00.35	21.50	02.11	00.41	19.71	29.81
BOB	06.22	00.21	03.39	04.72	00.84	18.00	-24.12
PNB	07.20	00.88	12.29	04.27	00.74	17.33	-40.64
OBC	04.78	01.00	21.00	07.13	00.56	07.89	49.23
IDBI	06.05	01.47	24.31	06.21	00.35	05.70	02.64
Over all	06.10	00.83	13.74	06.26	01.21	15.37	02.57

**Source:** Compiled from Annual Reports of the Banks

The table 3 indicates that the mean ratio interest expenses to working fund during pre merger period ranges between 4.78 to 7.24 with an overall mean of 6.103 and CV of 13.74% among the ten banks. For all banks have higher mean ratio whereas the other banks have lower mean ratio compared to the overall mean ratio. The mean ratio of post merger period ranges between 2.11 to 8.25 with an overall mean of 6.26 and CV of 15.37%. Two banks namely ICICI and PNB have higher mean ratio whereas the other seven banks have lower mean ratio compared to the overall mean ratio. Regarding the percentage of change in the mean ratio SBI, OBC and ICICI the interest expenditure is increased in the post merger period compared to the pre merger period and in other cases it is reduced during post merger period in relation the pre merger period. It is concluded from the above table that interest expenditure in relation to working fund, a major commitment of the banking concern is increased in case of the SBI, HDFC, ICICI, SCB, OBC and IDBI and in all other cases it is reduced.

# TEST OF SIGNIFICANCE OF THE OVERALL MEAN RATIO INTEREST EXPENSES TO WORKING FUND OF PRE AND POST MERGER PERIOD PAIRED t- Test

Mean Difference:	SE (mean difference):	
- 0.1578	0.5542	

### **OCTOBER - DECEMBER 2025**

Calculated t- value:	DF: 9	Table value:
- 0.285 (NS)		2.306

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The t-test shows that there is no significant difference in the mean ratios interest expenses to working fund between pre and post period of merger.

### **SPREAD TO WORKING FUND (X3)**

The ratio of spread as percentage of working fund is one of the important indicators to determine the profitability of banks. It is calculated as the difference between the first two ratios viz., interest income to working fund and interest paid to working fund. This ratio provides a cushion for meeting the expenses of management and administration.

Table No. 4
Spread to Working Fund

Spread to working rund							
BANKS	PRE MERGER			POS	ST MER	GER	MEAN
	MEAN	SD	CV (%)	MEAN	SD	CV (%)	GROWTH RATE
SBI	01.87	00.84	31.49	03.01	00.34	11.26	60.70
UBI	04.14	00.67	16.21	02.76	00.36	13.07	-33.46
HDFC	02.07	00.49	23.70	03.10	00.76	24.80	49.71
ICICI	02.44	00.48	19.92	03.94	00.75	19.08	61.27
HKSBC	02.54	00.15	06.00	02.42	00.22	09.21	-04.64
SCB	01.85	00.64	34.52	02.22	00.36	16.52	19.48
BOB	03.24	00.27	8.517	03.17	01.03	32.73	-02.16
PNB	05.65	00.35	21.50	02.11	00.41	19.71	29.81
OBC	01.68	00.35	20.86	03.16	00.18	05.69	87.87
IDBI	01.87	00.75	41.59	03.01	00.26	09.55	60.70
Over all	02.41	00.81	33.49	02.89	00.49	16.61	19.61

**Source:** Compiled from Annual Reports of the Banks

The table 4 indicates that the mean ratio spread to working fund during pre merger period ranges between 1.682 to 4.148 with an overall mean of 2.416 and CV of 33.49% among the ten banks. Four banks namely BOB, UBI, ICICI and PNB have higher mean ratio whereas the other banks have lower mean ratio compared to the overall mean ratio. The mean ratio of post merger period ranges between 2.220 to 3.498 with an overall mean of 2.890 and CV of 16.61%. The banks namely SBI, OBC, BOB, HDFC, ICICI and IDBI have higher mean ratio whereas the other three banks have lower mean ratio compared to the overall mean ratio. It is observed from the table that the percentage of change in the mean ratio spread to working fund between the pre merger and post merger period in case of SBI, OBC, HDFC, ICICI, AXIS and IDBI is positive and it is ranging from 19.483% to 87.872% and in case of BOB, UBI and PNB it is negative ranges from -33.46% to -2.16%. It is concluded that the spread available during the post merger period compared to pre merger period is better in case of all the banks except BOB, UBI and PNB.

TEST OF SIGNIFICANCE OF THE OVERALL MEAN RATIO SPREAD TO WORKING FUND OF PRE AND POST MERGER PERIOD PAIRED t- Test

THRED C Test								
Mean Difference:	SE (mean difference):							
-0 .5638	0.3186							
Calculated t- value: -1.769 (NS)	DF: 9	Table value: 2.306						

The table shows that there is no significant difference in the mean ratio spread to working fund between pre and post period of merger.

Rati Banks os **HDF ICIC HKSB IDBI SCB BOB PNB OBC SBI UBI**  $\mathbf{C}$ C N N N N S S NS S S S S S S S S S S S S S S S **X1** X2**X3** 1 Total 2 1 1 1 2 1 2 2 1 2 1 1 2 2 1

Table No. 5
Evaluation of Spread Ratios

### **S – SYNERGYNS – NO SYNERGY** Source: Compiled from Relevant tables FINDINGS

- 1. It is indicated from the study that the Interest income in relation to working fund of post merger period is increased compared to the pre merger.
- 2. The study reveals that the interest expenses of SBI, OBC, HDFC, ICICI and IDBI in relation to their working fund is increased.
- 3. The study concludes that the spread available during the post merger period compared to pre merger period is better in case of all the banks except BOB, UBI and PNB.

### **SUGGESTIONS**

The primary objective of M & As activities is to build new competencies and capabilities, to remain competitive and to grow profitably thereby increase the value of the firm and stand as a leader in the market. There are few suggestions to the banks which are merged and have a plan to merge in future and also to other stakeholders that emanate from the study. The banks may take steps to improve their interest income by maximizing the loan and advances through optimum utilization of the manpower and other facilities and relevant measures. The merger activity leads to no prominent change in the establishment expenses and operating expenses. So the banks could concentrate on this area and take relevant measures to reduce it. The banks should analyze the specific reason for reduction in profitability and aim for higher profit through increased business (traditional and core business activities) The banks may take steps to control NPAs and improve the market price of their shares.

### **CONCLUSION**

The new economic environment of the 1990s has facilitated M&As between banks. The present study indicated average performance of acquiring banks based on all indicators during the study period was relatively better. But it could not be concluded as evidence of improvement in terms of various parameters. With supported relative information a correct position can be identified. The policy makers can use the findings of the study as a base for framing policies relating to M&As in service sector. Also it identifies the areas of improvement for better profitability and performance for the banks. The investors could decide their investments in the service sector and the researchers can base this study for their future research activities in the area of M&As.

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